

FIG. 1

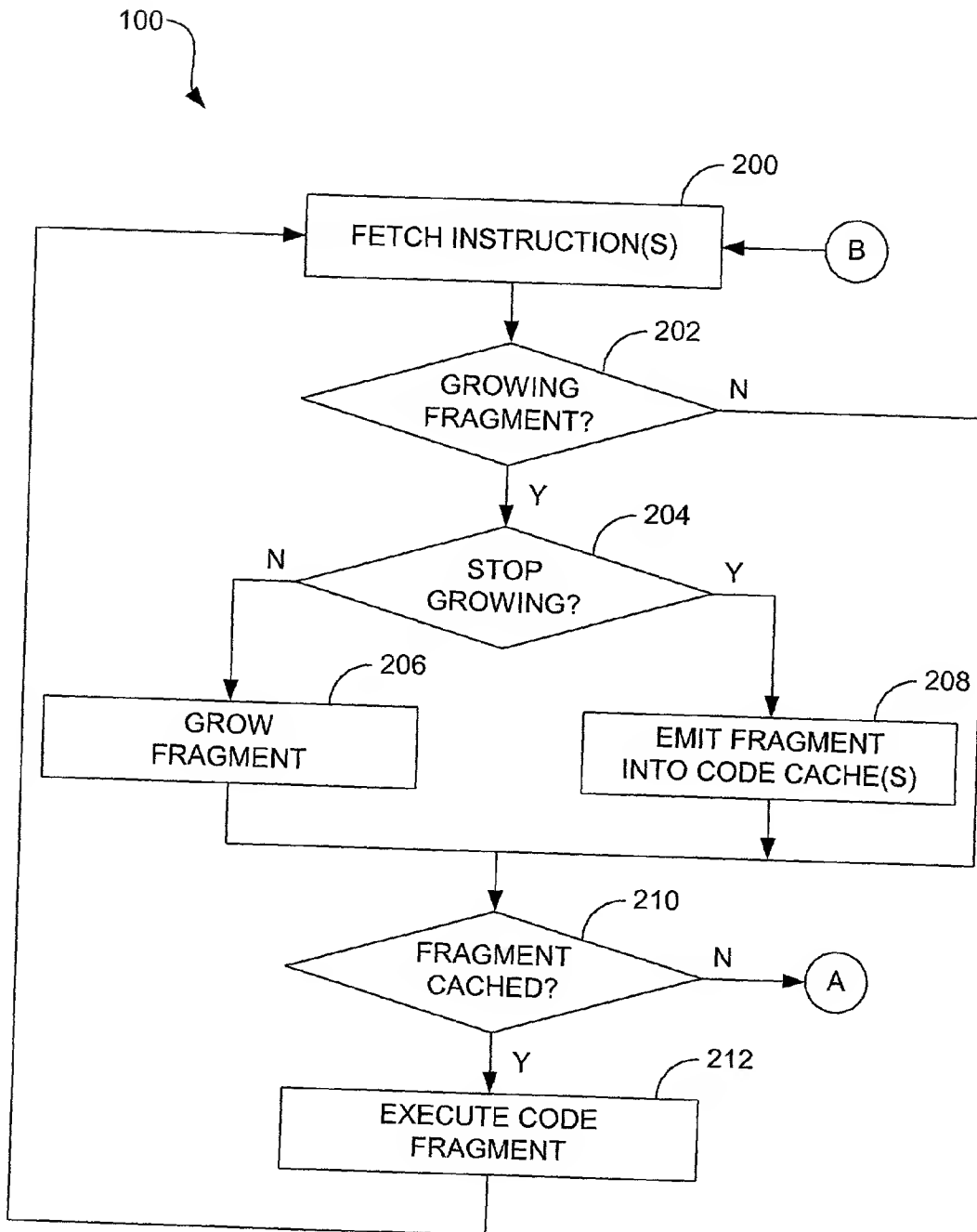
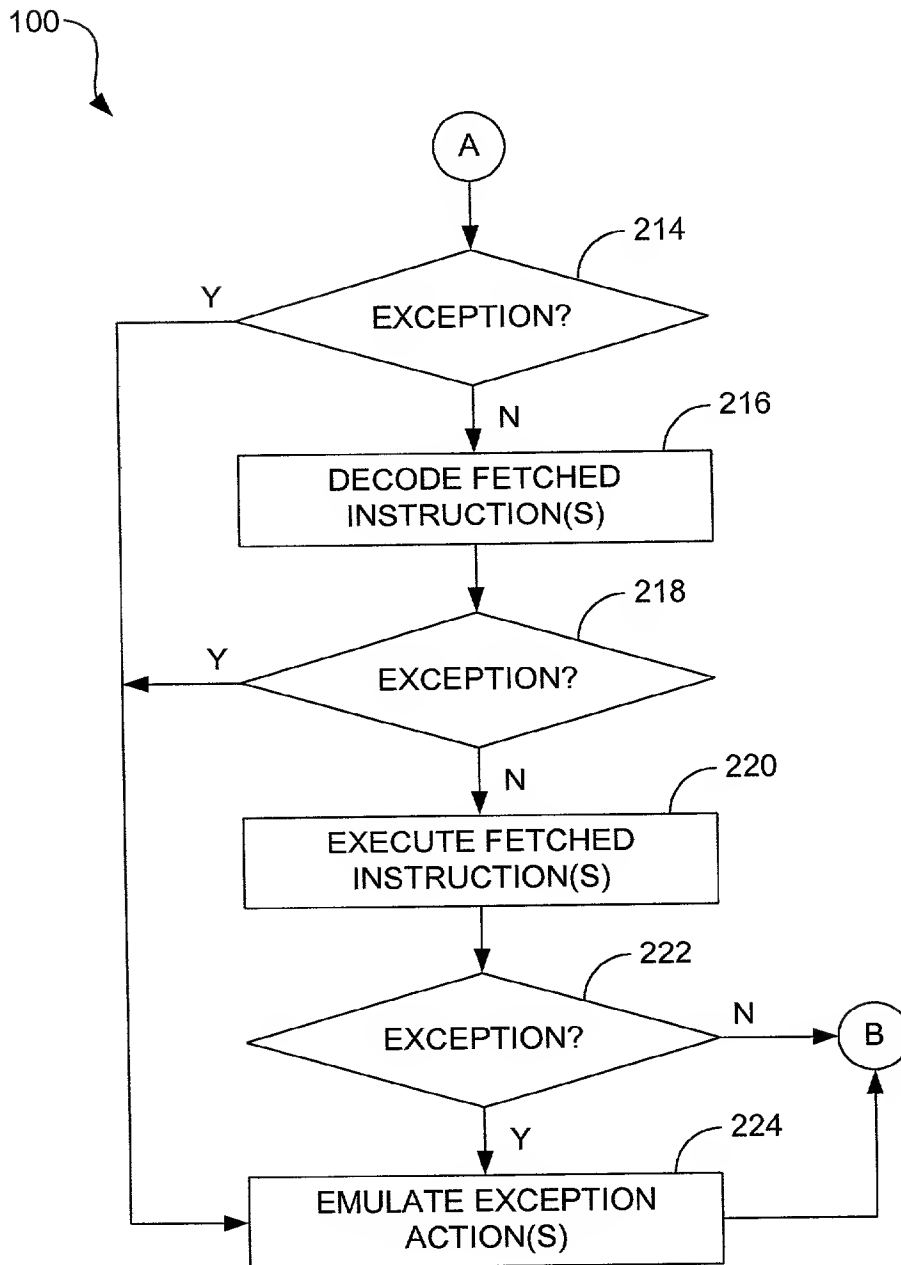
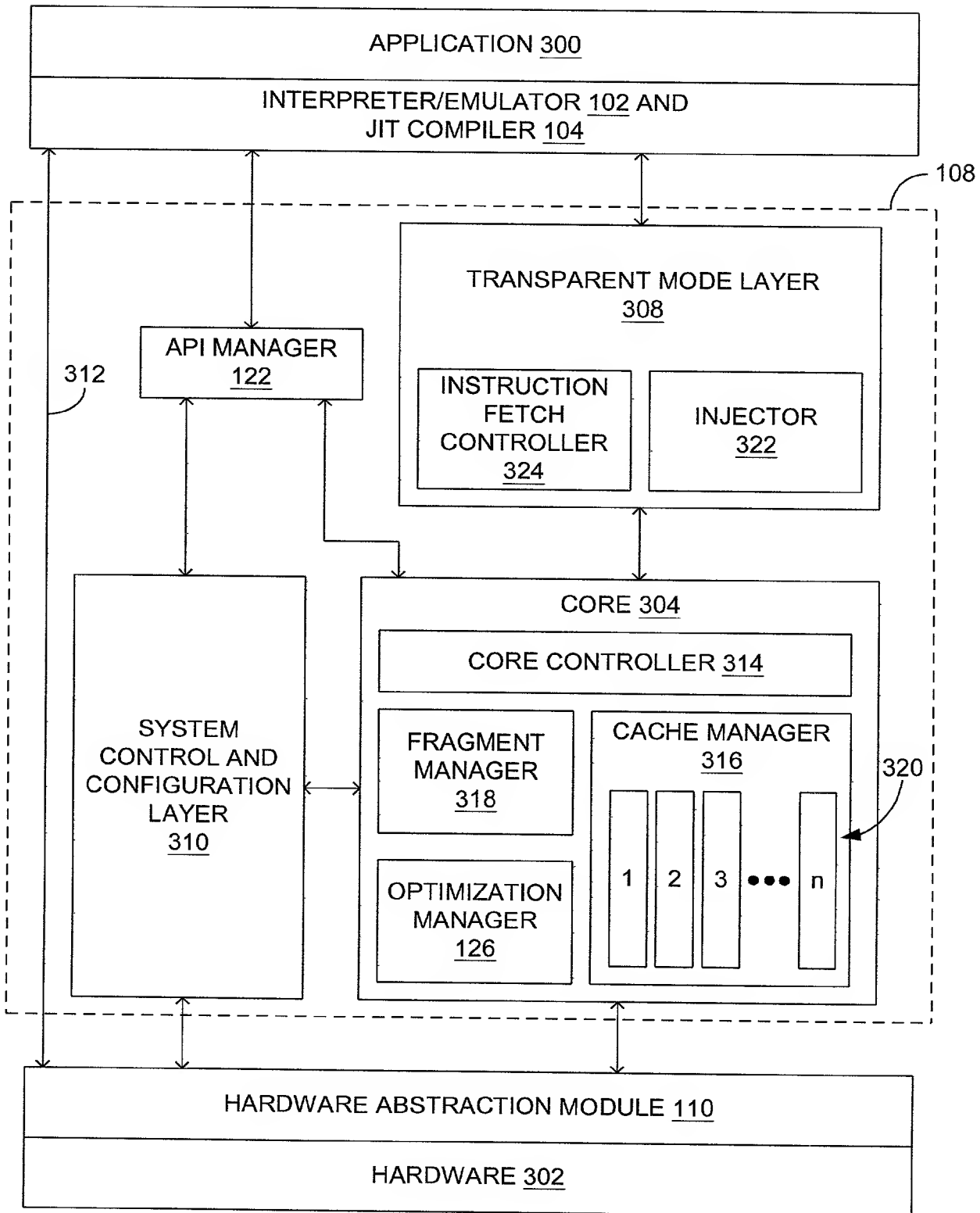


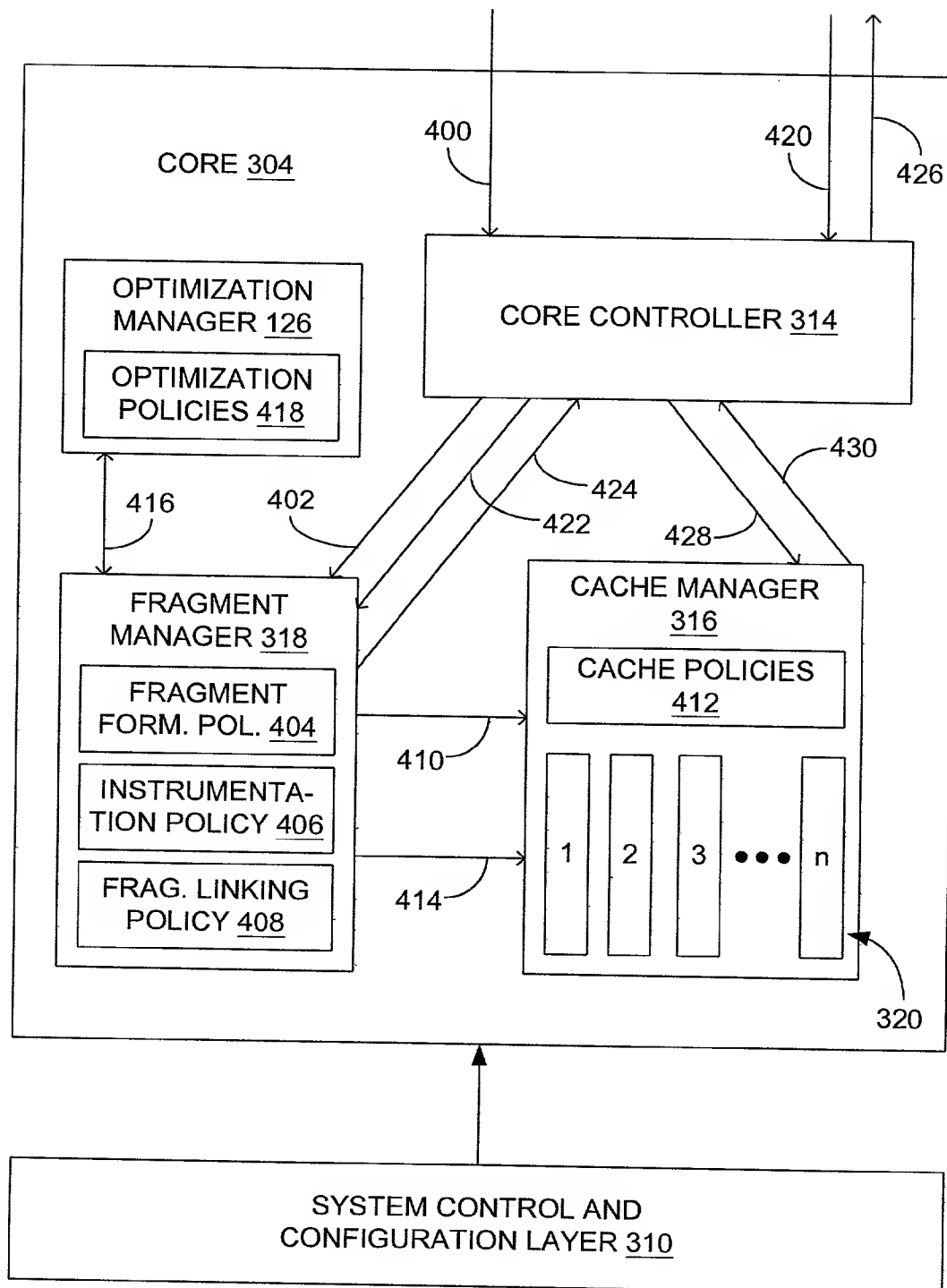
FIG. 2A



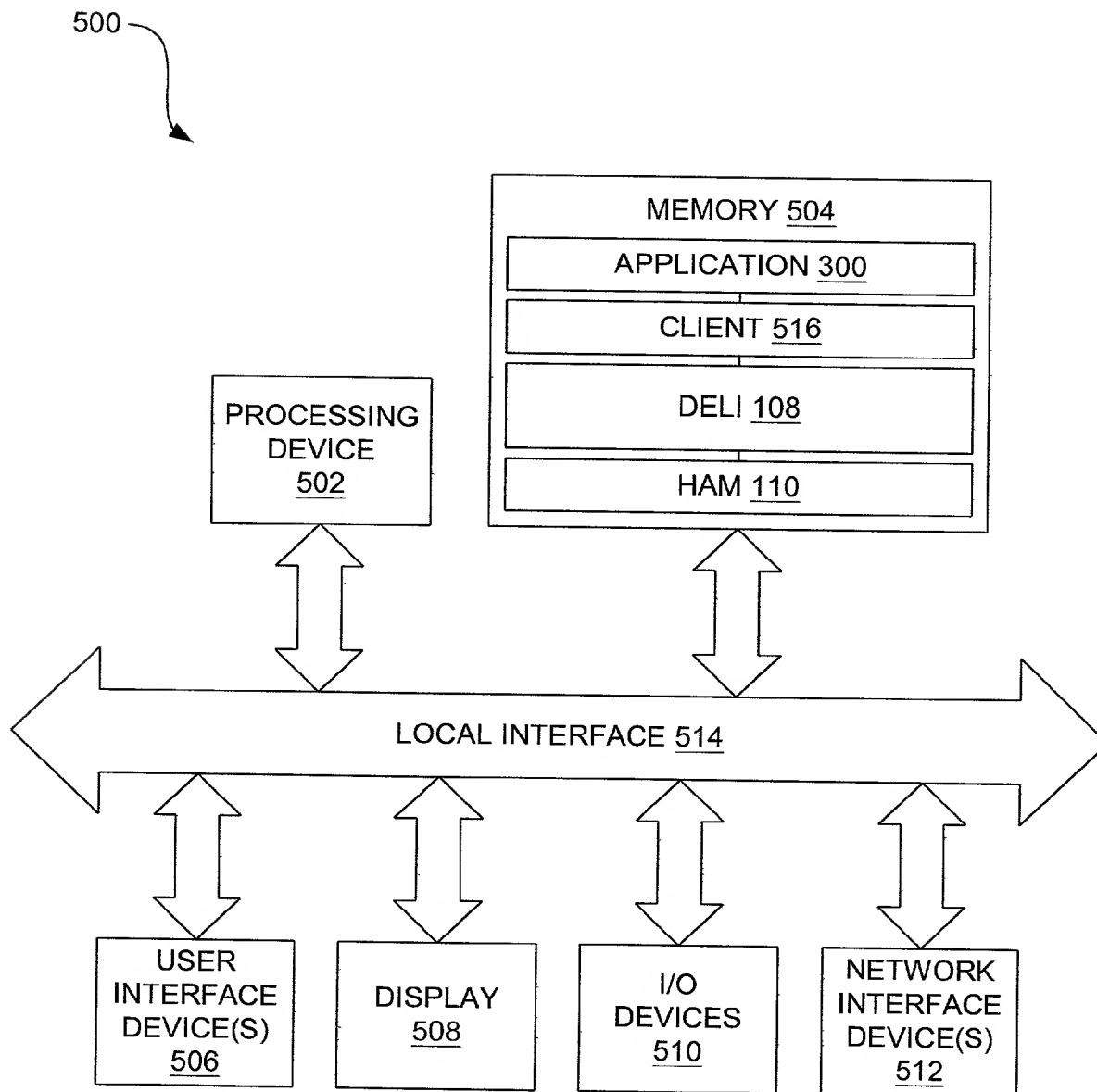
**FIG. 2B**



**FIG. 3**



**FIG. 4**



**FIG. 5**

Deli\_init();  
Deli\_start();  
Deli\_stop();  
Deli\_emit\_fragment (tag, start, end, mode, user\_data)  

- Stable/transient fragments support
- Transformations
- Instrumentations
- Profiling
- Optimization
- Tracking
- Metadata
- Multiple caches

  
Deli\_exec\_fragment (tag, context)  
Deli\_lookup\_fragment (tag)  
Deli\_invalidate\_fragment (frag\_id)  

- Unlinking
- Lazy invalidation
- Flushing
- Garbage collection

  
Deli\_enum\_fragment (callback)  
Deli\_cache\_flush()  

- Complete flush
- Lazy Invalidation
- On demand
- Profile based

  
Deli\_install\_callback (deli\_event, callback)  

- Code cache flushes
- Fragment invalidations
- Fragment profiling events
- Fragment user defined assertions
- Trace formation
- Metadata recombination

**FIG. 6**